

Appl. No. 10/524,643  
Amdt. dated April 1, 2010  
Reply to Office Action of December 24, 2009

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

1 - 90. (Canceled)

91. (previously presented): A pBHT1 vector having a nucleic acid sequence of ATCC Deposit No. PTA-10152.

92. (previously presented): The pBHT1 vector of claim 91, wherein the vector further comprises a polynucleotide encoding a self-protein associated with an autoimmune disease.

93. (previously presented): The pBHT1 vector of claim 92, wherein the autoimmune disease is multiple sclerosis.

94. (previously presented): The pBHT1 vector of claim 93, wherein the self-protein associated with multiple sclerosis is selected from the group consisting of myelin basic protein (MBP), proteolipid protein, myelin associated glycoprotein, cyclic nucleotide phosphodiesterase, myelin-associated glycoprotein, myelin-associated oligodendrocytic basic protein; alpha-B-crystallin and myelin oligodendrocyte glycoprotein.

95. (withdrawn): The pBHT1 vector of claim 92, wherein the autoimmune disease is insulin dependent diabetes mellitus (IDDM).

96. (withdrawn): The pBHT1 vector of claim 95, wherein the self-protein associated with insulin dependent diabetes mellitus (IDDM) is selected from the group consisting of tyrosine phosphatase IA2, IA-2 $\beta$ , glutamic acid decarboxylase (65 and 67 kDa forms),

carboxypeptidase H, heat shock proteins, glima 38, islet cell antigen 69 KDa, p52, islet cell glucose transporter GLUT-2, insulin, proinsulin and preproinsulin.

97. (previously presented): The pBHT1 vector of claim 94, wherein the self-protein associated with multiple sclerosis is myelin basic protein (MBP).

98. (New): The pBHT1 vector of claim 94, wherein the self-protein associated with insulin dependent diabetes mellitus is proinsulin.

99. (New): A vector comprising nucleic acid sequence of ATCC Deposit No. PTA-10152 and a nucleic acid sequence encoding a self-protein associated with insulin dependent diabetes mellitus.

100. (New): The vector of claim 99 wherein the self-protein associated with insulin dependent diabetes mellitus encoded by the nucleic acid is proinsulin.

101. (New): A pharmaceutical formulation comprising the vector of claim 99 in a pharmaceutically acceptable carrier.